WILDLIFE RESTORATION PROGRAM HIGHLIGHTS

Sage Grouse Study – Nevada:

Objectives are to estimate sage grouse populations in Nevada and determine trends over time; to estimate sage grouse population production, mortality, and survival variables and develop a map that depicts sage grouse population genetics in Nevada; to develop a historical/current range distribution data base; to evaluate relationships among sage grouse habitat, mortality and harvest; to organize and coordinate local conservation planning efforts statewide and to provide a database to be used by biologists and those involved in conservation planning efforts; to determine the impacts of raven predation on sage grouse recruitment; and to coordinate the statewide sage grouse conservation grant to ensure compliance with Federal Aid in Wildlife Restoration regulations and provide for efficient use of funds and personnel. This information will be used to formulate and prioritize local area conservation planning in order that State and national strategies for the protection and enhancement of sage grouse populations and habitat can be developed. Photo courtesy of the U.S. Fish and Wildlife Service.

Elk Livestock Project – Oregon:

Objectives of this project are to develop generalized and automated procedures for evaluation of animal-unit forage equivalencies among free ranging elk, deer, and cattle under various grazing systems, allotment conditions, and management practices; to evaluate the importance of bull elk numbers and age and archery hunting during the rut on elk reproductive success; to compile, analyze, and summarize data collected from archery hunters regarding effort and success; and to monitor and analyze elk, mule deer, black bear, and mountain lion populations trends and other parameters across Oregon for 5 years or longer and summarize and report the results. Understanding the relationship of forage utilization between deer, elk, and cattle will assist in determining cattle stocking levels and wild ungulate populations that are compatible with range

conditions and primary uses of the land. Understanding what bull elk age classes are most productive and efficient in breeding will guide decisions in setting hunting regulations and population objectives that maximize recreational opportunities and herd health. Work continued toward completing a model that predicts elk, mule deer, and cattle distributions on landscapes of 5,000 to 50,000 acres, the typical size range for grazing allotments. Staff are validating resource selection functions for elk on monthly time steps from data collected from GPS collars placed on elk captured in Sled Springs Wildlife Management Unit. Twenty-four GPS collars were placed on elk in spring 2004 and 23 collars were recovered in fall 2004. Over 320,000 elk locations were successfully downloaded from these collars. Work continues with cooperators from Eastern Oregon Agricultural Research Station to complete manuscripts contrasting and comparing elk, mule deer, and cattle diets, diet quality, and intake rates with and without cattle and elk grazing. An expected contract for computer programming for the forage allocation model was not let because most of the anticipated work was completed near the end of the previous grant segment, but after the grant was submitted for processing. The computer programmer/modeler continued to work on the project this year but was paid by the US Forest Service. Photo courtesy of the U.S. Fish and Wildlife Service.

Red Slough Wetland Restoration Project – Oklahoma:

The restoration of Red Slough is an amazing success story. Situated in the far-southeastern corner of Oklahoma, this large wetland project is located within the floodplain of the Red River. Strategically located, the wetland is considered a "crossroads" where the range of many eastern, western and gulf coastal migratory birds meet. Drained in the mid-1960s, the 7,000-acre wetland project was only recently restored through efforts involving the Natural Resources Conservation Service under the Wetland Reserve Program. Owned by the U.S. Forest Service, a unique partnership composed of the Natural Resource Conservation Service, U.S. Forest Service, and Oklahoma Department of Wildlife Conservation manages the project primarily for waterfowl and other migratory birds. Federal Assistance dollars have already provided critical funding matches with the Wildlife Department's duck stamp program to benefit operation and management of the project. Photo courtesy of Oklahoma Department of Wildlife Conservation.

Dove Hunt – Missouri:

The mourning dove is North America's most popular game bird and that holds true for Missouri hunters as well. Last year, the Missouri Department of Conservation increased dove field management efforts on 75 conservation areas scattered throughout every part of the state. Providing dove fields in dozens of locations gives hunters who don't have connections with private landowners, places to pursue doves. This was especially true for accessibility challenged dove hunters who greatly benefited by increased disabled access to managed dove fields. During 2003, more than 43,500 dove hunters harvested 806,349 doves statewide. In 2004, hunters bagged 10,666 doves at Columbia Bottom Conservation Area alone and posted the state's top average of 3.1 birds taken per hour of hunting, using an average of 4.1 shotgun shells for every bird bagged. Maps showing the locations of dove fields were available through the Department's regional offices statewide and were available on the Department's Website. Wildlife Restoration Program funding helped make the Missouri dove hunting efforts such a big success. Photo courtesy of Missouri Department of Conservation.

Joe Budd Wildlife Management Area – Florida:

Located only a few miles from Florida's capital city of Tallahassee is the Joe Budd Wildlife Management Area, a biologically diverse 11,039-acre area that blends wildlife-based recreation, including high quality hunting opportunities, with research and demonstration, education and public outreach, restoration and maintenance of natural communities, and sustainable extraction of renewable natural resources. The area is managed by the Fish and Wildlife Conservation Commission and funded through Federal Assistance in Wildlife Restoration. Joe Budd is among Florida's most popular public hunting areas, attracting an average of 3,300 hunter-days each year. An additional 5,800 kids attend day classes during the school year as well as one of four week long summer camps at the environmental education center. Visitors enjoy horseback riding, fishing, and wildlife viewing which logs another 2-3,000 user-days. In addition, the area hosts several hunter safety training and classes for

students throughout the year. Photo courtesy of Florida Fish and Wildlife Conservation Commission.

Moose Survey – New Hampshire:

The New Hampshire Fish and Game Department uses part of its Wildlife Restoration Grant funding for wildlife surveys and inventories to study moose and other management efforts. In addition to evaluating biological data collected at check stations and information from hunter surveys, the Department conducts field studies on the reproductive success and survival of moose. A project in cooperation with the University of New Hampshire involves capturing and fitting some adult animals, but primarily six-month-old calves, with radio collars to determine the factors affecting recruitment and annual survival, estimate survival rates, and study habitat use. Several dozen moose have been captured and radio-collared using helicopter net-gunning. Photo courtesy of New Hampshire Fish and Game Department.

Mountain Lion Survey – South Dakota:

This grant contains one important study using Federal Aid in Wildlife Restoration funds. The Grant contains a study of South Dakota's mountain lion population. In the past 10 years the population of mountain lions has significantly increased, especially in the Black Hills region of western South Dakota. Management of this species has become an extremely controversial issue, with the possibility of opening a hunting season for mountain lions. South Dakota State University researchers are utilizing Federal Aid in Wildlife Restoration funds to conduct a five-year mountain lion study. This study is aimed at documenting home ranges of the animal, its population size, and survival rate and dispersal patterns. Researchers are studying a population of 145 of the big cats in the Black Hills. Photo courtesy of USFWS.

Harmless Baits and Snares Assist Black Bear Conservation – Alaska:

A project funded from 2000-2004 with $168,000 of Federal Wildlife Restoration funds involving barbed wire, antibiotics, and cooperative bear hunters has provided revealing insights into one of the world's densest and heavily hunted populations of black bears - on Kuiu Island in Southeast Alaska. Using a mark-recapture population estimation method with tetracycline-laced bear bait and toe bone samples from hunted bears that reveal any tetracycline ingestion, researchers determined that an average of four bears live per square mile on the island. Using barbed wire to snare black bear hair samples along bear trails, researchers used DNA analyses to estimate that about 175 different bears use one mile of a spawning salmon stream over two months. By using these new and innovative methods in wildlife and conservation genetics to solve old wildlife management problems of estimating bear numbers, the Alaska Department of Fish and Game will be able to better manage black bears for long-term population sustainability and hunting opportunity.